Please amend the paragraph beginning at line 20 of page 2 as follows:

However, owing to limitation of time, it is impossible for the quality department to test all produced integrated circuits through both the infant mortality period and the normal life period, even only through the infant mortality period. As usual, the quality department only perform a stress test, or called as accelerated test, to test produced integrated circuits through a specific period under a testing environment in which is more harmful and danger for tested integrated circuits, and then the relation between the failure rate and testing time is measured. Then, in accordance with the difference between the testing environment and a normal operating environment to estimate the relation between failure rate and real time, in which is the experienced time under the normal environment.

Please amend the paragraph beginning at line 5 of page 3 as follows:

Indisputably, how to properly and correctly transform the failure rate testing time relation into the failure rate real time relation, is the key about whether failure rate time relation can be properly acquired by the stress test.

Please amend the paragraph beginning at line 17 of page 3 as follows:

Significantly, because the failure rate time relation is acquired by referring to the formula in accordance with testing records, well-known arts can not avoid following disadvantages: (1) the difference between the experimental value and the theoretical value can not be found by the used formula; (2) the best burn-in time only can be acquired by experience or formula, it can not be acquired by the relation between the best burn-in time and the corresponding risk; (3) the reliability of produced integrated circuits can not be promised by ensuring the estimated value is almost the best value in accordance with the comparison between the experimental value and the theoretical value.

Please amend the paragraph beginning at line 17 of page 4 as follows:

On the whole, one method present by the invention at least includes following basic steps: Method for determining failure rate and selecting a best burn-in time, comprising: provide numerous integrate circuits; performs a life-time testing process, wherein a failure rate testing time relation is established by measuring the life-time of each integrated circuit under a testing environment, wherein an acceleration factor function also is established under the testing environment, the

acceleration factor function is related to the relationship between a testing time of the testing environment and a real time of a normal operating environment; performs a simulating process that a testing time function is used to simulate the failure rate testing time relation; performs a transforming process by using the acceleration factor function to transform the testing time function into a real time function, wherein a knee point of the real time function corresponds to an operation time which is the best burn-in time; and performs an integrating process to integrate the real time function through a calculating region to acquire an accumulated failure rate real time function, wherein the calculating region is a region in which the real time is larger than the best burn-in time.

Please amend the paragraph beginning at line 12 of page 6 as follows:

One major disadvantage of conventional arts is that values of part used parameters and values of part used functions, such as chi square function, are acquired from some pre-established tables, especially same pre-determined tables are used to analysis different testing records of different samples. It is indisputable that some external variables, which are not acquired from testing records, are used to calculate the failure rate time relation, and then the failure rate time relation can not be obtained only by testing records. Aims on previous discussion, the

4

claimed invention presents a way to estimate the failure rate time relation only in accordance with testing records, and then only errors induced by estimating process will be an issue but errors induced by external variables will not be an issue.

Please amend the paragraph beginning at line 25 of page 7 as follows:

As simulating block 23 shows, performs a simulating process that uses a testing time function to simulate the failure rate testing time relation. Whereby, the simulating process is adjusted to let a difference, such as least squares, between the failure rate testing time relation and the testing time function is minimized. Further, the testing time function is a function of testing time. Moreover, because usually only the infant mortality period and the normal life period must be considered, and also owing to the hint of FIG. 1, the testing time function usually is an exponent function, a polynomial of testing time or $y=at^b$, wherein a and b are two variables, y is the failure rate and t is the testing time.

Please amend the paragraph beginning at line 18 of page 8 as follows:

As integrating block 25 shows, performs an integrating process that integrates the real time function through a calculating region to

acquire an accumulated failure rate real time function. Whereby, the calculating region is a region in which the real time is larger than the best burn-in time. Certainly, because integrated circuits usually never are used to the wear out period, it is reasonable that integrating process is stopped while said testing time in which is corresponds by said testing time is located in said wear out period, and then result of the integrating process is the accumulated failure rate during the normal life period.

Please amend the paragraph beginning at line 25 of page 9 as follows:

As integrating block 35 shows, performing an integrating process by integrating the real time function through a calculating region to acquire an accumulated failure rate real time function. Whereby the calculating region is a region in which real time is larger than the best burn-in time.

Please amend the paragraph beginning at line 23 of page 10 as follows:

Obviously, because the claimed invention never uses any mathematical formula and never uses any external parameter which is not acquired from the testing records, and also because the claimed invention is a numerical approach method, it is reasonable that the

claimed invention can decide the error range by "trial and approach" and also can decide the precision of the acquired accumulated failure rate real time function.

Please amend the paragraph beginning at line 21 of page 11 as follows:

For example, while the failure rate time relation is as shown in FIG. 4A that the curve is formed by following testing records 6H-12H-18H ...and so on, it is obviously that 12H, the second testing record, is a good knee point and no other obvious knee point is existent, and then the required time function can be acquired from following testing records 6H-12H-23H ...and so on. However, while the failure rate time relation is as shown in FIG. 4B that curve is formed by 6H-12H-18H-24H(knee point)-30H... and so on, or while the failure rate time relation is as shown in FIG. 4C that curve is formed by 6H-12H-18H(near knee point)-24H(near knee point)-30H...and so on, it is necessary to delete the first few testing records, for example deleting the 6H and 12H for FIG. 4C and deleting 6H for FIG. 4B, to let the knee point is the second used testing recorded. And the time function is calculated while the knee point is properly selected.

Please amend the paragraph beginning at line 13 of page 11 as follows: